

# Practice A

For use with pages 589–593

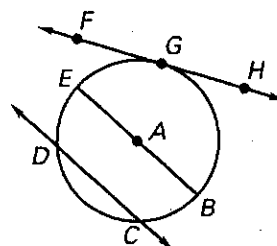
Match the word(s) with the descriptive phrase.

1. a segment whose endpoints are points on a circle
2. a chord that passes through the center of a circle
3. a segment whose endpoints are the center of a circle and a point on the circle
4. a line that intersects a circle in two points
5. a line in the plane of a circle that intersects the circle in exactly one point

- A. tangent
- B. chord
- C. secant
- D. radius
- E. diameter

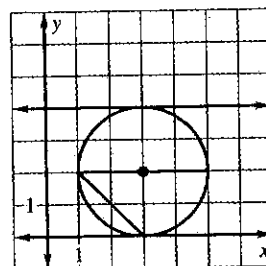
Match the part of the circle with the term that best describes it.

6.  $\overline{CD}$
  7.  $G$
  8.  $A$
  9.  $\overline{CD}$
  10.  $\overline{EB}$
  11.  $\overline{AE}$
- A. chord
  - B. radius
  - C. center
  - D. secant
  - E. diameter
  - F. point of tangency



In Exercises 12–16, use the circle to name the coordinates of the points.

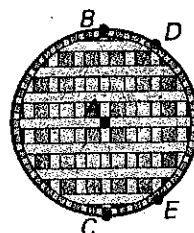
12. a point of tangency
13. endpoints of a radius
14. endpoints of a diameter
15. endpoints of a chord that is not a diameter
16. center



17. What is the radius of a circle with a 42-inch diameter?

A cherry pie has a lattice top crust. Name the term that best describes the given segment or point.

18.  $\overline{BC}$
19.  $\overline{DE}$
20.  $\overline{AC}$
21.  $A$



# LESSON 11.2

NAME \_\_\_\_\_

DATE \_\_\_\_\_

## Practice A

For use with pages 594-600

In Exercises 1-3, match the words and the symbols with the theorem statement.

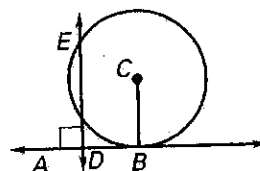
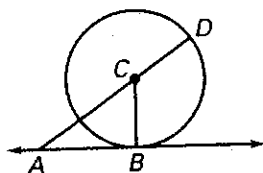
1. If a line is tangent to a circle, then it is perpendicular to the radius drawn at the point of tangency.
2. In a plane, if a line is perpendicular to a radius of a circle at its endpoint on the circle, then the line is tangent to the circle.
3. If two segments from the same point outside a circle are tangent to the circle, then they are congruent.
4. In the diagram below,  $\overleftrightarrow{AB}$  is tangent to  $\odot C$  at point  $B$ . Name a right angle.

A. If  $\overline{SR}$  and  $\overline{ST}$  are tangent to  $\odot P$  at points  $R$  and  $T$ , then  $\overline{SR} \cong \overline{ST}$ .

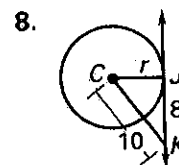
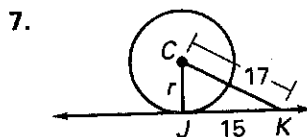
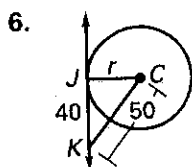
B. If  $\ell$  is tangent to  $\odot C$  at  $B$ , then  $\ell \perp \overline{CB}$ .

C. If  $\ell \perp \overline{CB}$ , then  $\ell$  is tangent to  $\odot C$  at  $B$ .

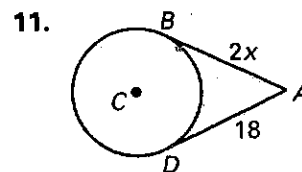
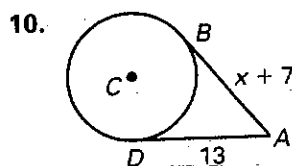
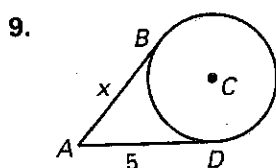
5. In the diagram below,  $\overleftrightarrow{AB} \perp \overline{CB}$ . Name a line that is tangent to  $\odot C$ .



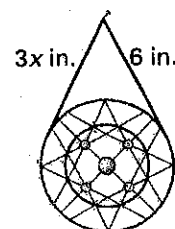
$\overleftrightarrow{JK}$  is tangent to  $\odot C$ . Find the value of  $r$ .



$\overline{AB}$  and  $\overline{AD}$  are tangent to  $\odot C$ . Find the value of  $x$ .



12. You are hanging a circular sun catcher from a nail as shown. The hanging chord forms two tangent segments with the outside of the sun catcher. Find the value of  $x$ .



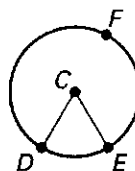
# Practice A

For use with pages 601–607

Use the diagram at the right to identify the arc.

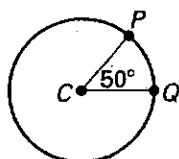
1. major arc

2. minor arc

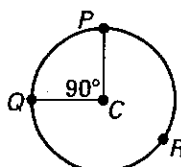


Find the measure of the arc.

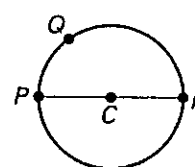
3.  $m\widehat{PQ}$



4.  $m\widehat{PRQ}$

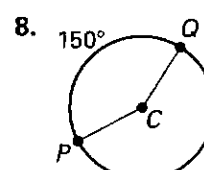
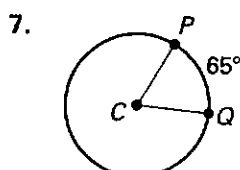
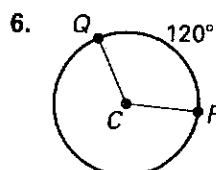


5.  $m\widehat{PQR}$



$\overline{PR}$  is a diameter.

Find the measure of  $\angle PCQ$ .

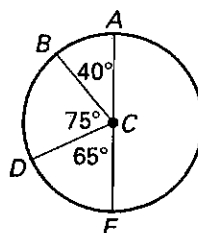


In the diagram at the right,  $\overline{AE}$  is a diameter.  
Find the measure of the arc.

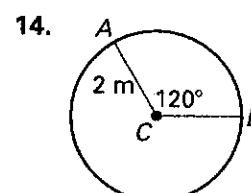
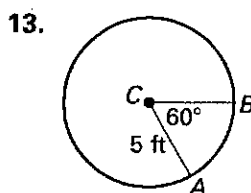
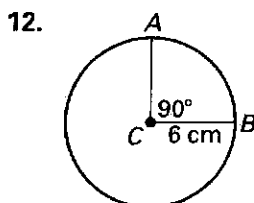
9.  $m\widehat{AD}$

10.  $m\widehat{BE}$

11.  $m\widehat{AED}$



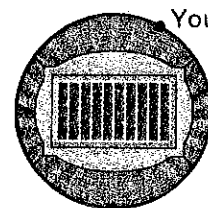
Use the formula: Arc length of  $\widehat{AB} = \frac{m\widehat{AB}}{360^\circ} \cdot 2\pi r$ . Find the length of  $\widehat{AB}$  and round your answer to the nearest hundredth.



The drawing at the right shows your position relative to the front gate of a large, circular stadium.

15. If you take a clockwise route to the front gate, do you make a minor arc or a major arc?

16. The measure of one arc you could follow to the front gate is  $208^\circ$ . What is the measure of a smaller arc you could follow?



Front Gate

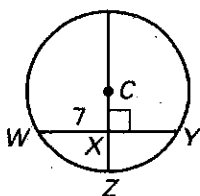
# Practice A

For use with pages 608–612

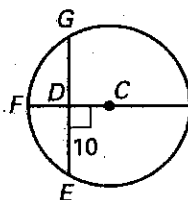
Complete the statement.

1. If a diameter of a circle is ? to a chord, then the diameter bisects the chord and its arc.
2. If one chord is a perpendicular bisector of another chord, then the first chord is a ?.
3. In the same circle, or in congruent circles, if two chords are congruent, then their corresponding minor arcs are ?.
4. If two minor arcs of a circle are congruent, then their corresponding ? are congruent.

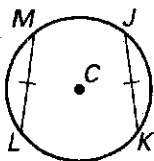
5. Find the length of  $\overline{WY}$ .



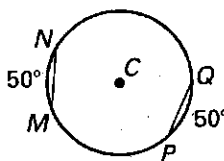
6. Find the length of  $\overline{GD}$ .



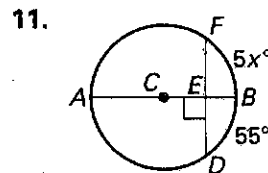
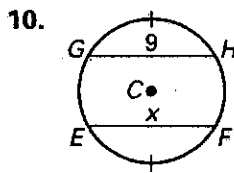
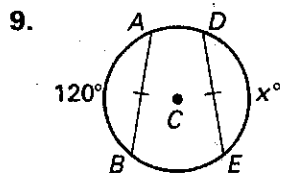
7. Identify a pair of congruent arcs.



8. Identify a pair of congruent chords.



Find the value of  $x$ .



A serving tray with diameter  $\overline{AB}$  has four sections.

12. If  $\overline{AB} \perp \overline{DF}$ , name a pair of congruent segments.
13. If  $\overline{AB} \perp \overline{DF}$ , name a pair of congruent arcs.

